



# My background

**Carnegie  
Mellon  
University**

**Math, Stats,  
CS / ML**

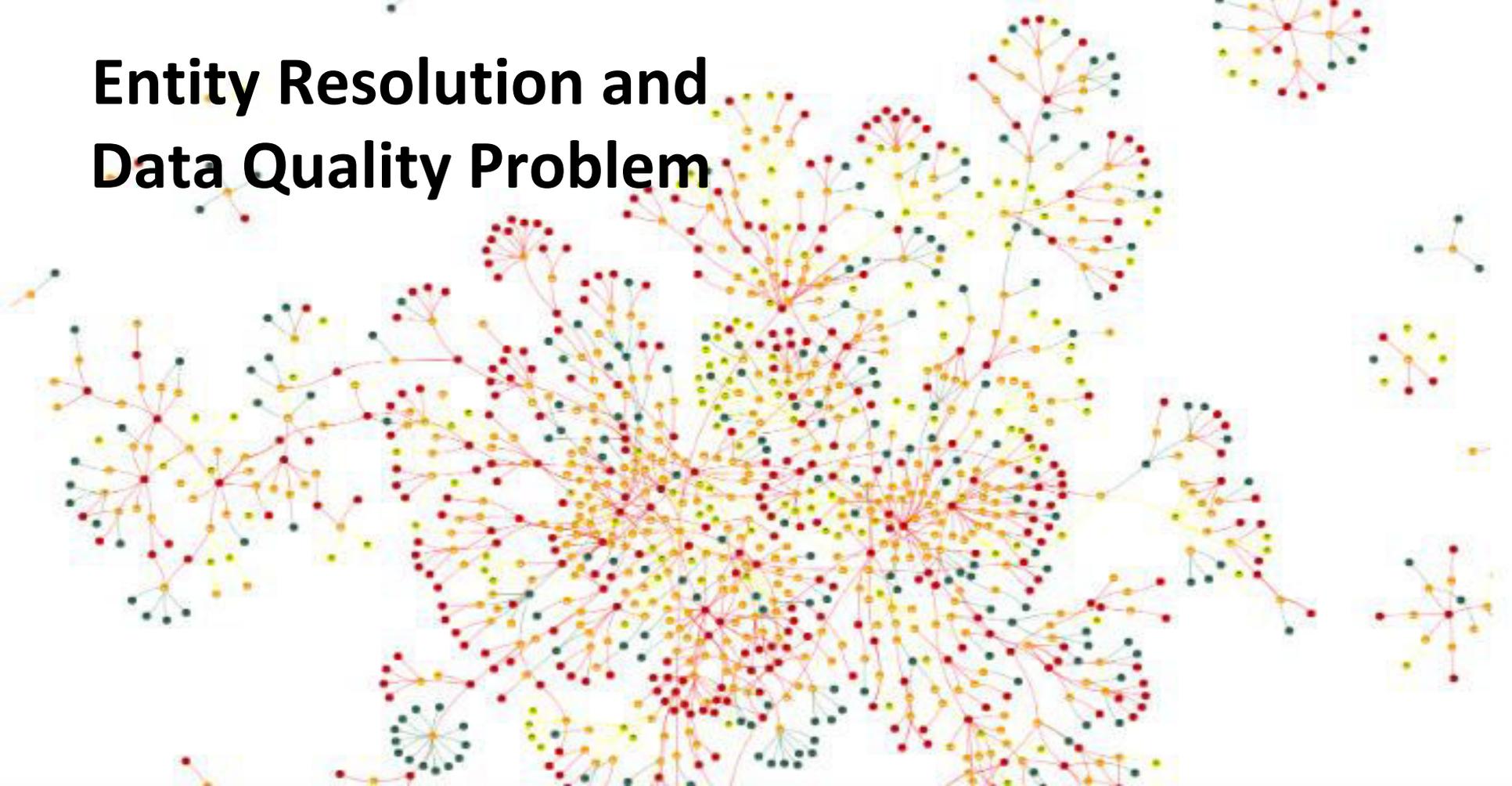


**Data Science,  
Data Engineer**

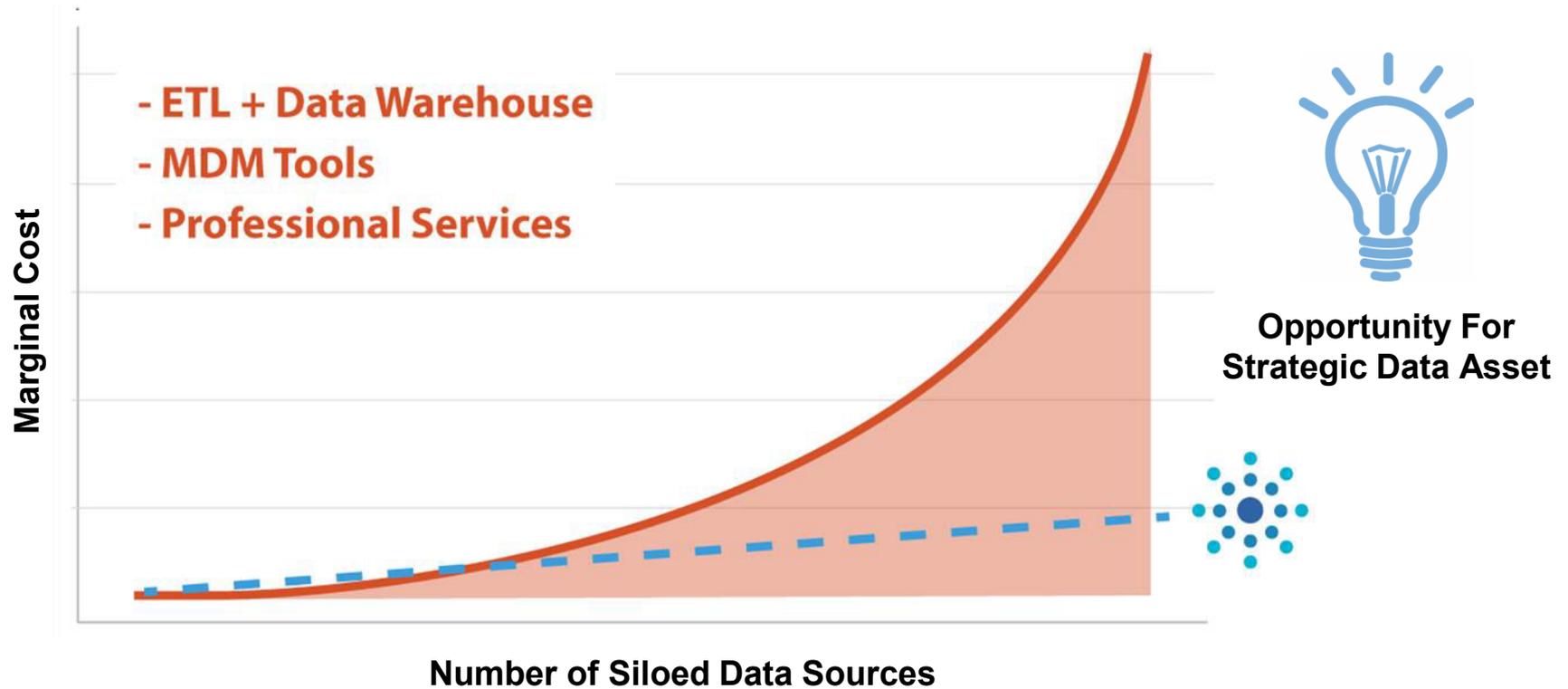


**Solution Architect,  
Presales**

# Entity Resolution and Data Quality Problem



# Traditional Methods Don't Scale with Number of Sources



# Why I get excited about Enterprise: Scale, Scale, Scale

## Problem

8

Divisions

500+

ERP Systems

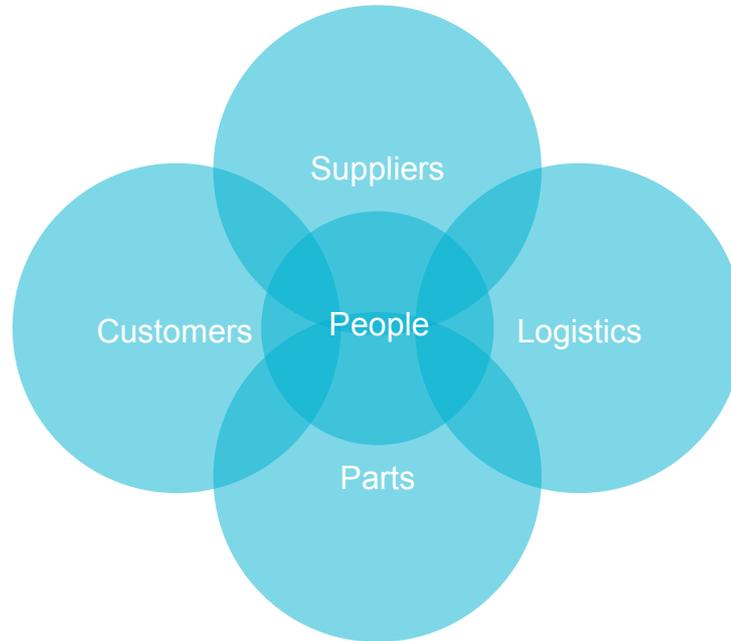
100K+

Suppliers

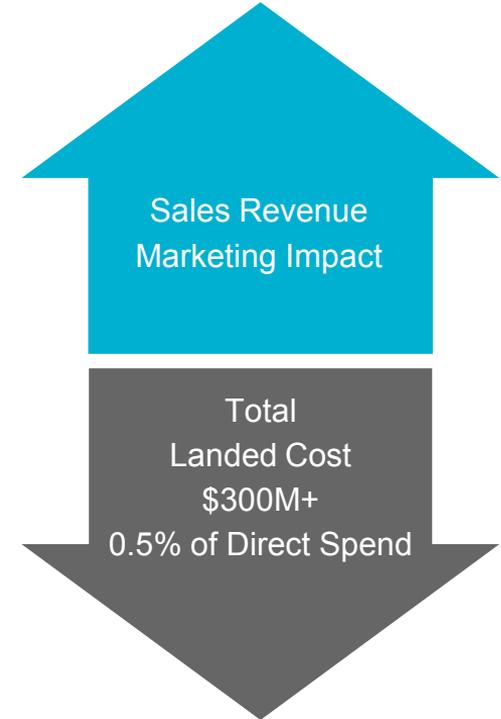
10M+

Customers

## Solution

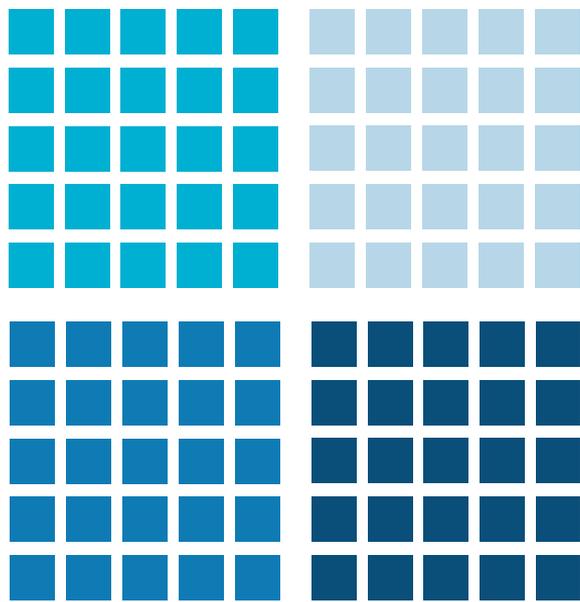


## Results



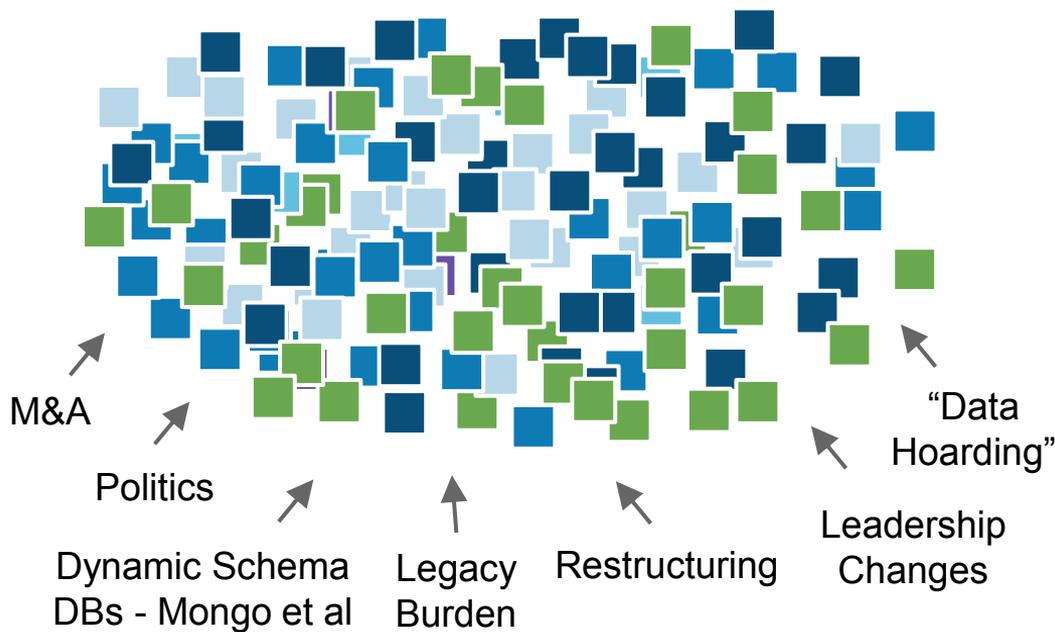
# Dirty Little Secret: Data Variety in Enterprise

What most people think enterprise data looks like



What enterprise data is really like - “random data salad”

Prone to constant change/entropy



# What Tamr Does

**Tamr solves the enterprise data variety problem to power transformative analytic and operational outcomes.**



THOMSON  
REUTERS

## **10X Reduction**

In New Data Set Integration  
From 6 Months to 2 Weeks

[Video Case Study](#)



**\$500M+ Savings**  
From Sourcing Analytics  
Across Businesses

[Video Case Study](#)



**TOYOTA**

**Customer Insights**  
Unified buyer profiles across  
siloeed dealer systems in 30+ geos

[Video Case Study](#)

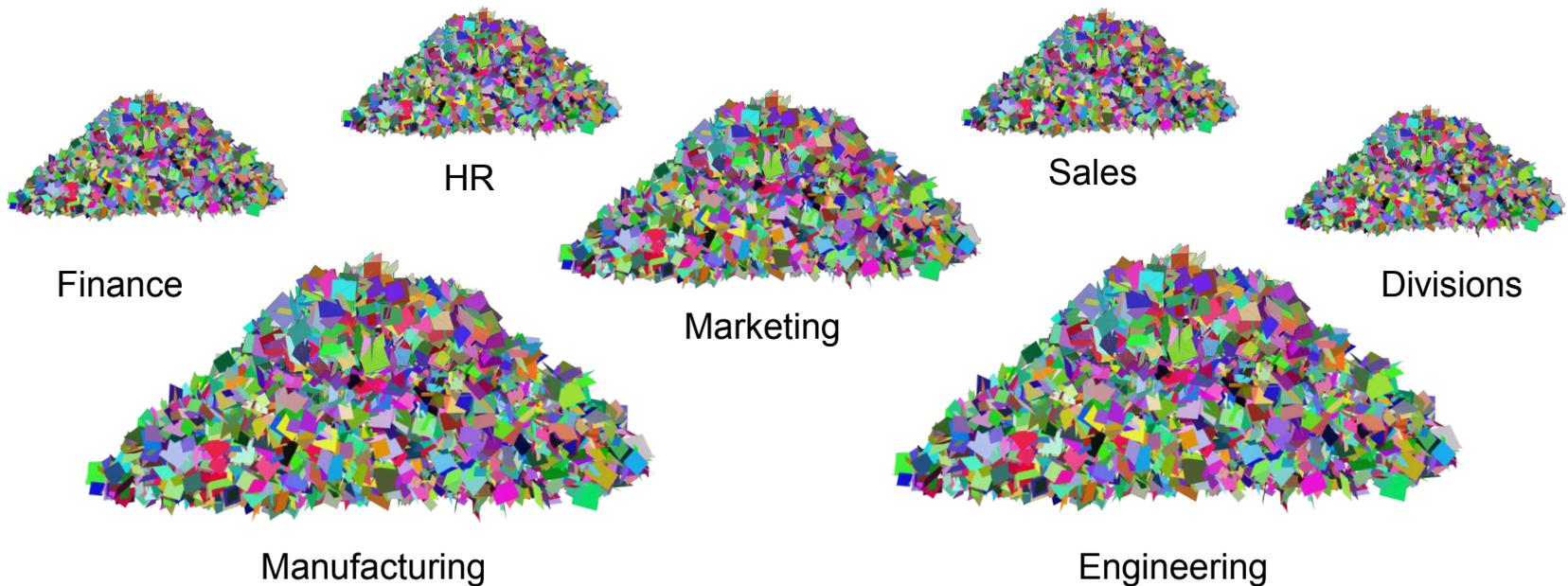


**5000+ Studies**  
Unified clinical study data  
to empower researchers

[Case Study](#)

# Reality for Global Corporate IT as Data Broker

*Most data is untreated + unprepared for expensive analytics tools*



# Some Options

**Option #1** - Deny Variety - use information that is easiest/closest

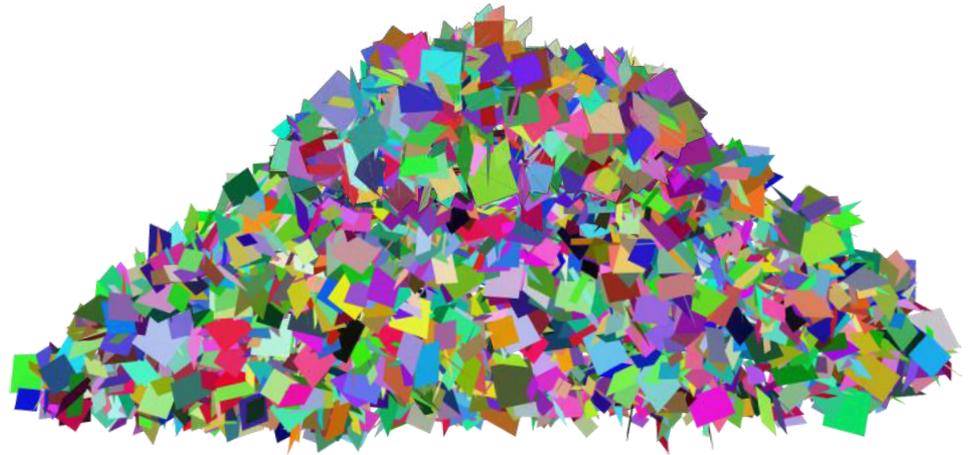
**Option #2** - Manage Variety incrementally - using traditional approaches:

- Standardization
- Aggregation
- Master Data Management
- Rationalize Systems
- Throw Bodies at it
- Improve Individual Productivity

**Option #3** - Embrace Variety using probabilistic/model based approach - Tamr

## Option #1: “Deny” Variety

*Use only the information that is closest, most familiar, easiest to obtain*



# Option #2: “Manage” Variety Using Traditional Approaches

**Traditional Data Management Approaches:** Necessary but not sufficient

- **Standardization**
- Aggregation
- Master Data Management
- Rationalize Systems
- Throw Bodies at it
- Improve Individual Productivity

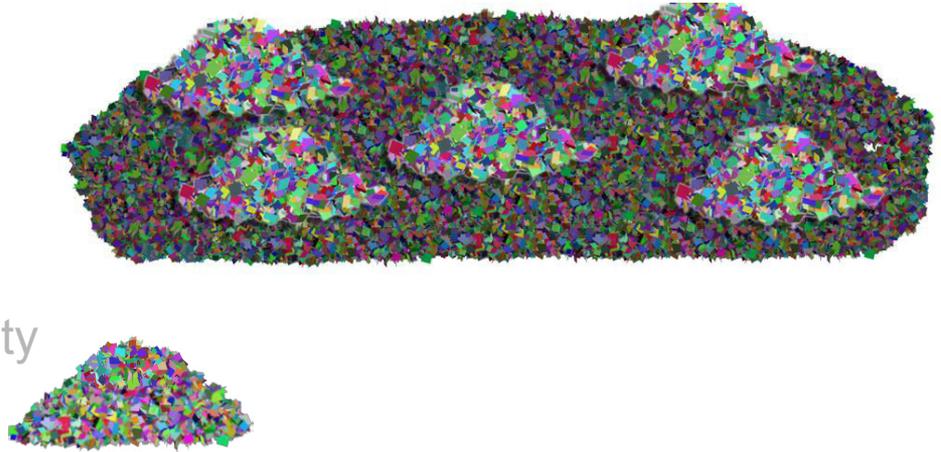


**One Schema to Rule them All**

# Option #2: “Manage” Variety Using Traditional Approaches

## **Traditional Data Management Approaches:** Necessary but not sufficient

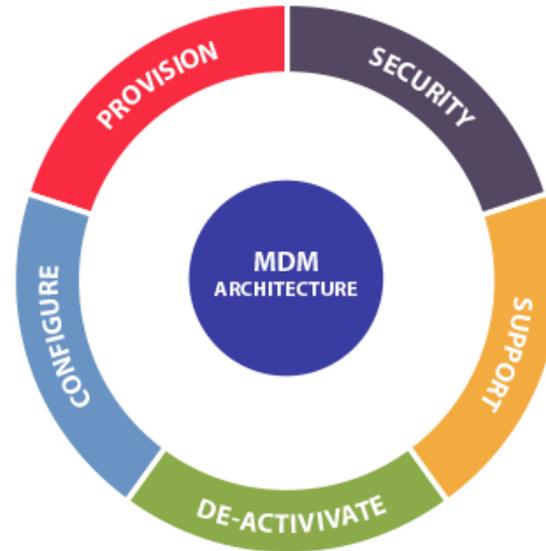
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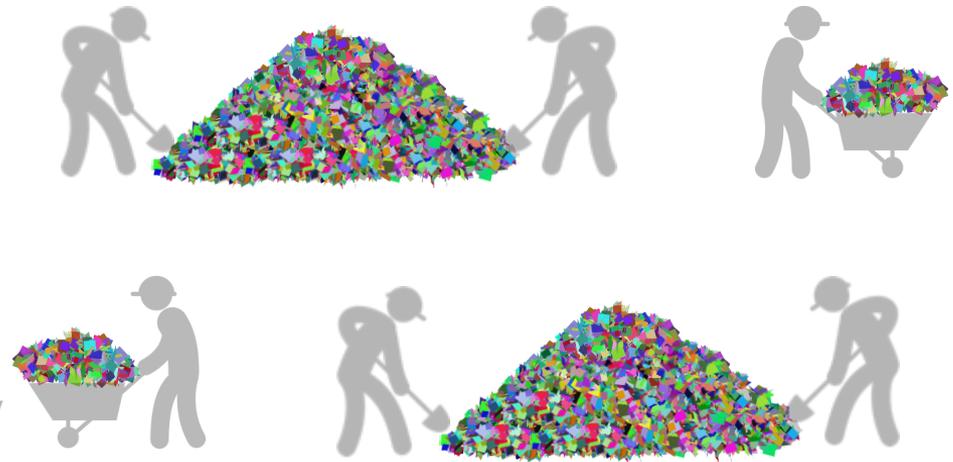
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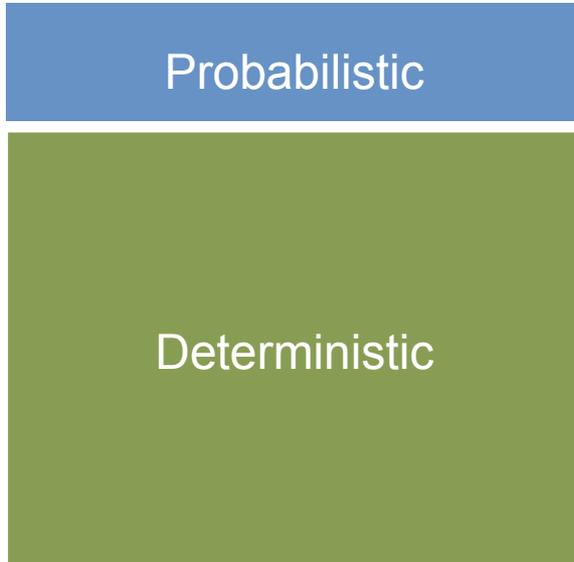
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# Logical Evolution to Probabilistic/Model-Based Approach

Probabilistic (Tamr) *Complements*, NOT Replaces, Deterministic (MDM)

## Today

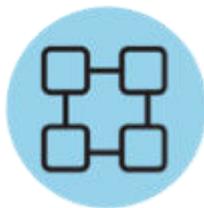


## Future



# Option #3: “Embrace” Variety -- Tamr’s NextGen Approach

*Managing enterprise information as an asset requires a new, bottom-up design pattern*



## **Combine**

ALL your metadata and map it to logical entities



## **Consolidate**

Entities and attributes to remove information silos



## **Classify**

Organize your data into an analytics-ready hierarchy

# The Two Second Rule.

“Anything that takes a human longer than two seconds is probably unlikely for ML to automatically learn.”

- Andrew Ng, Chief Scientist, Baidu